Express Mail Label No.: <u>EV422550717US</u>

|  | FORM PTO-1390 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE   |  | ATTORNEY'S DOCKET NUMBER                       |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|--|--|
| (REV. 10-2   | TRANSMITTAL LETTER  | SHM-15820  |  |  |  |  |  |  |  |
|  |   | ED OFFICE (DO/EO/US)                             | U.S. APPLICATION NO. (If known, see 37 CFR 1.5 |  |  |  |  |  |  |
|  | CONCERNING A FILIN  | 10/517167  |  |  |  |  |  |  |  |
| INTER  | NATIONAL APPLICATION NO.  | INTERNATIONAL FILING DATE                        | PRIORITY DATE CLAIMED                          |  |  |  |  |  |  |
| דודו ב   | PCT/JP03 /08183 /   | 27 June 2003                                     | 03 July 2002                                   |  |  |  |  |  |  |
| FUEL (   | FUEL CELL SEPARATOR AND METHOD OF MANUFACTURING THE SEPARATOR   |  |  |  |  |  |  |  |  |
| APPLICANT(S) FOR DO/EO/US KAWACHI, Shinya; KIMURA, Mikihiko  |   |  |  |  |  |  |  |  |  |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:                |   |  |  |  |  |  |  |  |  |
| 1. This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.  |   |  |  |  |  |  |  |  |  |
| 2.   | This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.   |  |  |  |  |  |  |  |  |
| 3.   | This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. |  |  |  |  |  |  |  |  |
| 4. 🕱   | ,   |  |  |  |  |  |  |  |  |
| 5. 🗶   |   |  |  |  |  |  |  |  |  |
|  | <ul><li>a.  is attached hereto (required)</li><li>b.  has been communicated by</li></ul>  | · ·  | iai Bureauj.                                   |  |  |  |  |  |  |
|  |   | ication was filed in the United States Receiving | ng Office (RO/US)                              |  |  |  |  |  |  |
| ·6. 🗶  |   |  |  |  |  |  |  |  |  |
| V. <b>[5</b>   | An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).  a.  is attached hereto.   |  |  |  |  |  |  |  |  |
|  |   | itted under 35 U.S.C. 154(d)(4).                 |  |  |  |  |  |  |  |
| 7. 🗶   |   |  |  |  |  |  |  |  |  |
|  | a. are attached hereto (required only if not communicated by the International Bureau).   |  |  |  |  |  |  |  |  |
|  | b. have been communicated by the International Bureau.  |  |  |  |  |  |  |  |  |
| •  | c. have not been made; however, the time limit for making such amendments has NOT expired.  |  |  |  |  |  |  |  |  |
|  | d.  have not been made and will not be made.  |  |  |  |  |  |  |  |  |
| 8.   | An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).  |  |  |  |  |  |  |  |  |
| ;9. ☐  | 9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).   |  |  |  |  |  |  |  |  |
| An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). |   |  |  |  |  |  |  |  |  |
| Items 11 to 20 below concern document(s) or information included:  |   |  |  |  |  |  |  |  |  |
| 11. 🗶  | 11. X An Information Disclosure Statement under 37 CFR 1.97 and 1.98.   |  |  |  |  |  |  |  |  |
| 12.  | An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.   |  |  |  |  |  |  |  |  |
| 13. 🗶  | A preliminary amendment.  |  |  |  |  |  |  |  |  |
| 14. 🗶  | An Application Data Sheet under 37 CFR 1.76.  |  |  |  |  |  |  |  |  |
| 15.  | A substitute specification.   |  |  |  |  |  |  |  |  |
| 16.  | A power of attorney and/or change of address letter.  |  |  |  |  |  |  |  |  |
| 17.  | A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.  |  |  |  |  |  |  |  |  |
| 18.  | A second copy of the published international application under 35 U.S.C. 154(d)(4).   |  |  |  |  |  |  |  |  |
| 19.  | A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).   |  |  |  |  |  |  |  |  |
| 20.  | Other items or information: English Translation of the International Preliminary Examination Report.  International Search Report.                                |  |  |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |  |  |

| U.S. APPLICATION NO. (#Ckno   | 751716  | ATTORNEY'S DOCKET NUMBER SHM-15820 |              |                        |    |  |  |  |  |
|---|---|------------------------------------|--------------|------------------------|----|--|--|--|--|
| 21. The follow  | ing fees are submitte                           | CALCULATIONS                       | PTO USE ONLY |                        |    |  |  |  |  |
|   | L FEE (37 CFR 1.49                              |                                    |              |                        |    |  |  |  |  |
| Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO     |   |                                    |              |                        |    |  |  |  |  |
| International prelin<br>USPTO but Intern  | ninary examination tational Search Report       | ·                                  |              |                        |    |  |  |  |  |
| International preling but international se  | ninary examination tearch fee (37 CFR 1.        |                                    |              |                        |    |  |  |  |  |
| International preliment all claims did n  | ninary examination to<br>tot satisfy provisions |                                    |              |                        |    |  |  |  |  |
| International prelin  | ninary examination                              |                                    |              |                        |    |  |  |  |  |
|   | fied provisions of Po                           | \$ 950.00                          |              |                        |    |  |  |  |  |
|   |   |                                    |              | \$ 950.00              |    |  |  |  |  |
| Surcharge of \$130.0 from the earliest cla  | 0 for furnishing the<br>med priority date (3    | \$ 130.00                          |              |                        |    |  |  |  |  |
| CLAIMS  | NUMBER FILED                                    |                                    | RATE         | \$                     | T  |  |  |  |  |
| Total claims  | 4 - 20 =  |                                    | x \$18.00    | \$ 0.00                |    |  |  |  |  |
| Independent claims  | 3 - 3 =   |                                    | x \$86.00    | \$ 0.00                |    |  |  |  |  |
| MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$290.00  TOTAL OF ABOVE CALCULATIONS =   |   |                                    |              | \$ 0.00<br>\$ 1,080.00 |    |  |  |  |  |
| Applicant claim are reduced by  | s small entity status                           | \$ 0.00                            |              |                        |    |  |  |  |  |
|   |   | \$ 1,080.00                        |              |                        |    |  |  |  |  |
| Processing fee of \$1 from the earliest class   | 30.00 for furnishing med priority date (3       | \$ 0.00                            |              |                        |    |  |  |  |  |
|   |   | \$ 1,080.00                        |              |                        |    |  |  |  |  |
| Fee for recording the accompanied by an   | enclosed assignme<br>appropriate cover sh       | \$ 0.00                            | ·            |                        |    |  |  |  |  |
|   |   | \$ 1,080.00                        |              |                        |    |  |  |  |  |
|   |   | TOTAL FEES E                       |              | Amount to be refunded: | \$ |  |  |  |  |
|   |   |                                    |              | charged:               | \$ |  |  |  |  |
| a. A check in the amount of \$ 1,080.00 to cover the above fees is enclosed.  |   |                                    |              |                        |    |  |  |  |  |
| b. Please charge my Deposit Account No. 18-0160 in the amount of \$ to cover the above fees.  A duplicate copy of this sheet is enclosed.   |   |                                    |              |                        |    |  |  |  |  |
| c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 18-0160. A duplicate copy of this sheet is enclosed. |   |                                    |              |                        |    |  |  |  |  |
| d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card  |   |                                    |              |                        |    |  |  |  |  |
| information should not be included on this form. Provide credit card information and authorization on PTO-2038.   |   |                                    |              |                        |    |  |  |  |  |
| NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.   |   |                                    |              |                        |    |  |  |  |  |
| SEND ALL CORRESPONDENCE TO:   |   |                                    |              |                        |    |  |  |  |  |
| David E. Spaw   | ,   | RE(/                               |              |                        |    |  |  |  |  |
| Customer Nun  | iber 040854                                     | E. Spaw                            |              |                        |    |  |  |  |  |
| Rankin, Hill, P   | orter & Clark, Ll                               |                                    |              |                        |    |  |  |  |  |
| 4080 Erie Stree   |   |                                    |              |                        |    |  |  |  |  |
| Willoughby, O   | hio 44094-7836                                  | ATION NUMBER                       |              |                        |    |  |  |  |  |